

Date: Monday, 11/05/2009 3:55:32 PM
 User: Julie Dawson

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: SUPPORT
Job Number	: 47896		
Estimate Number	: 10452		
P.O. Number	:	Part Number	: D32781
This Issue	: 11/05/2009 S.O. No. :	Drawing Number	: D3278 REV. C
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : MACHINED PARTS	Drawing Revision	: C
Previous Run	: 47886A	Material	:
Written By	:	Due Date	: 18/05/2009 Qty: 50 Um: Each
Checked & Approved By	: <u>JLD 09.05.11</u>		
Comment	: Est:A 04.04.19 New issue KJ/JLM		
	: est B 07.09.06 rev.c dwg EC verified by: JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	M6061T6B1000X02000	6061-T6 Bar 1.00 x 2.00
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Comment: Qty.: 0.2454 f(s)/Unit, Total : 12.2693 f(s)
 Material: 6061-T6/T651-(QQ-A-200/8) 1.00" thick
 (M6061T6B1.000x02.000)

Batch: M107130 X39M110829 X22mmf 09/05/15

(51)

2.0 BAND SAW

BAND SAW



(51)

Comment: Band Saw
 Cut blank: 2.00" x 1.00" x 2.550" long

mmf 09/05/15

3.0 HAAS1

HAAS CNC VERTICAL MACHINING #1



(50)

Comment: HAAS CNC VERTICAL MACHINING #1
 1- Machine as per Folio FA405 and Dwg D3278
 2- Deburr and Tumble
 Identify as D3278-1

mmf 09/05/20 SP 09/05/19

4.0 QC2

INSPECT PARTS AS THEY COME OFF MACHINE



(50)

Comment: INSPECT PARTS AS THEY COME OFF MACHINE

mmf 09/05/20SP 09/05/19

5.0 QC8

SECOND CHECK



Comment: SECOND CHECK

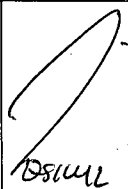
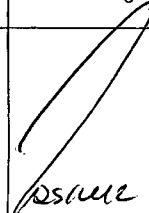

mmf 09/05/20

50

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3278-1 PAR #: N/A Fault Category: Prod/Eng Coordinator NCR: (Yes) No DQA: D Date: 09/05/08
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: D Date: 09/05/08

NCR: <u>47896</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/05/08	3,0	.119 $\pm .005$ are too small Qty 12 scrap. Parts roll up into the face millly became thinner on the top (minor top & under tolerance). P.C. process & program		Scrap and replace Qty 12 M.110829 Review program & process.	mmw 09/05/08	mmw 09/05/20		

NOTE: Date & initial all entries

Date: Monday, 11/05/2009 3:55:33 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SUPPORT

Job Number: 47896

Part Number: D32781

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

UMD 09/05/27 X50

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

8:20am

OVEN TEMPERATURE:

320°F

FINISH TIME:

8:50am

2U

09-05-

X50

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

FL 09/05/27

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

ST81

SS 09/05/27 X50

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/05/27

Job Completion


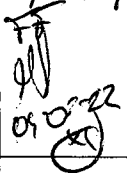
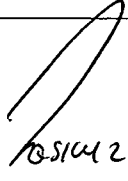
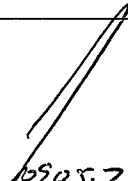


MF 09-05-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3278-1 PAR #: _____ Fault Category: _____ NCR: Yes (No) DQA: D Date: 09/05/28

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR: <u>47896</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
09/05/27	3.0	At 7.0 it was found 1 part was missing the 2098" holes. operation missed. re: LOA	 05/10/22	transfer dr. 11 the holes as per the dwg (to match). Touch-up holes with blockline.	09/05/27  05/10/22	S 09/05/27	 05/10/22	 09/05/27

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	47890
Description: Support		Part Number:	D3278-1
Inspection Dwg: D3278 Rev: C		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.098	+0.005/-0.000	.098	✓			
0.359	+/-0.005	.360	✓			
0.609	+/-0.010	.616	✓			
0.250	+/-0.010	.252	✓			
1.480	+/-0.005	1.479	✓			
R0.125	+/-0.010	.125	✓			
0.119	+0.005/-0.004	.120	✓			
2.439	+/-0.010	2.441	✓			
1.980	+/-0.010	1.982	✓			
R0.13	+/-0.030	.130	✓			
Ø0.257	+0.005/-0.000	.258	✓			
R0.375	+/-0.010	.375	✓			
0.875	+/-0.010	.873	✓			
0.500	+/-0.010	.502	✓			
R0.400	+/-0.010	.400	✓			
R1.00	+/-0.030	1.00	✓			
1.720	+/-0.010	1.721	✓			
R0.125	+/-0.010	.125	✓			
0.125	+/-0.010	.128	✓			

Measured by:	SS/mrf	Audited by:	QMR	Prototype Approval:	N/A
Date:	09/05/19	Date:	09/05/20	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.04.19	New Issue P/O D3278-041	KJ/JLM	
B	05.06.08	0.359 was 0.365; 0.119 was 0.125	KJ/JLM	
C	07.09.26	Dimensions updated per Dwg Rev. C	KJ/EC	AF

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

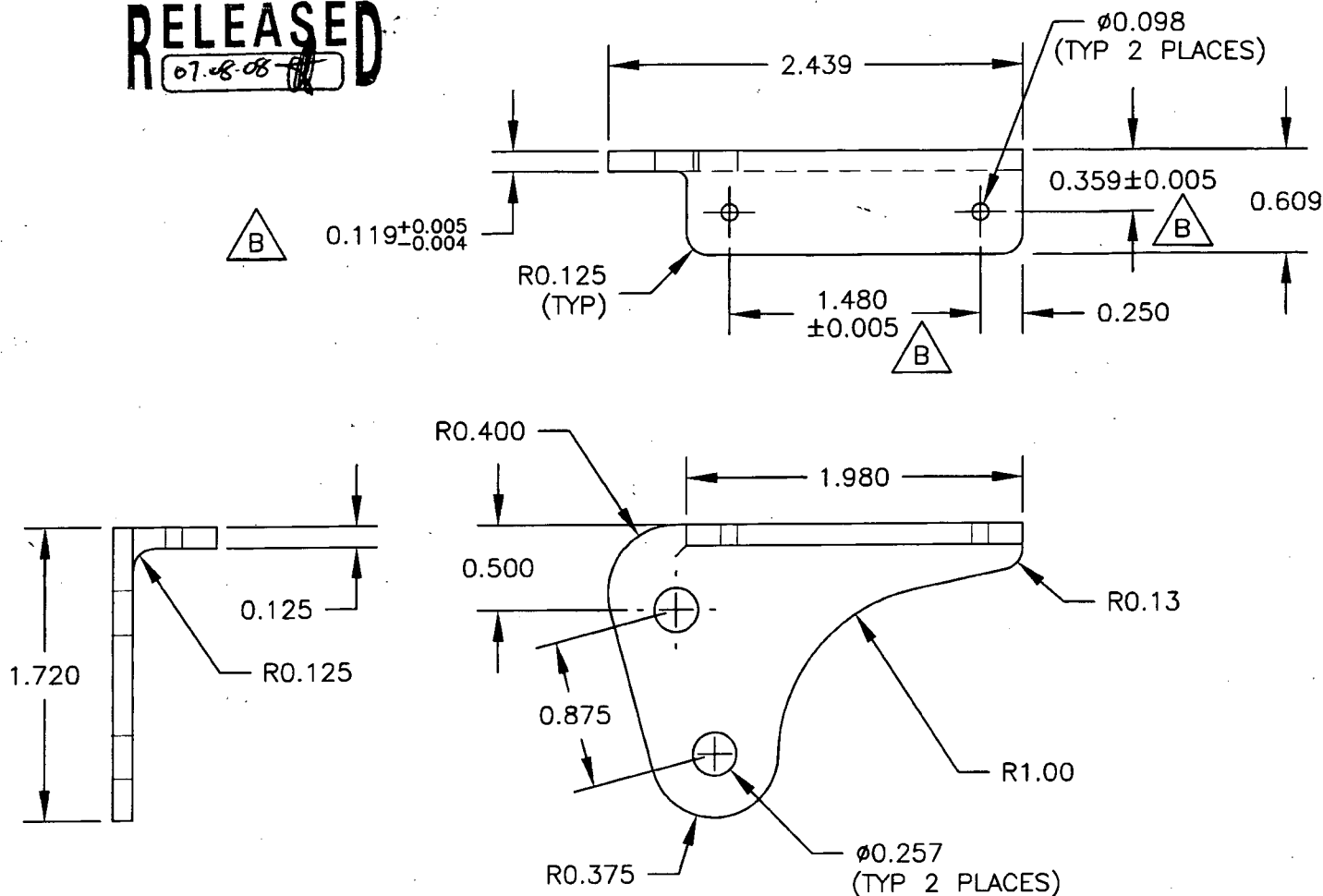
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>GP</i>	DRAWN BY <i>BC</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>B</i>	APPROVED <i>H</i>	DRAWING NO. D3278	REV. C SHEET 2 OF 3
DATE 07.07.24	TITLE SUPPORT ASSEMBLY		SCALE 1:1

RELEASED
07-08-08**D3278-1 SUPPORT (SHOWN)****D3278-2 SUPPORT (OPPOSITE)**

- 1) MACHINE PER DWG FILE "D3278-1.SLDPRT"
- 2) MATERIAL: 6061-T6 (OR 6061-T651/T6510/T6511/T62) BAR
PER AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)
PER AMS-QQ-A-200/8 (OR AMS 4160)
(REF. DART SPEC. M6061T6B)
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 6) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

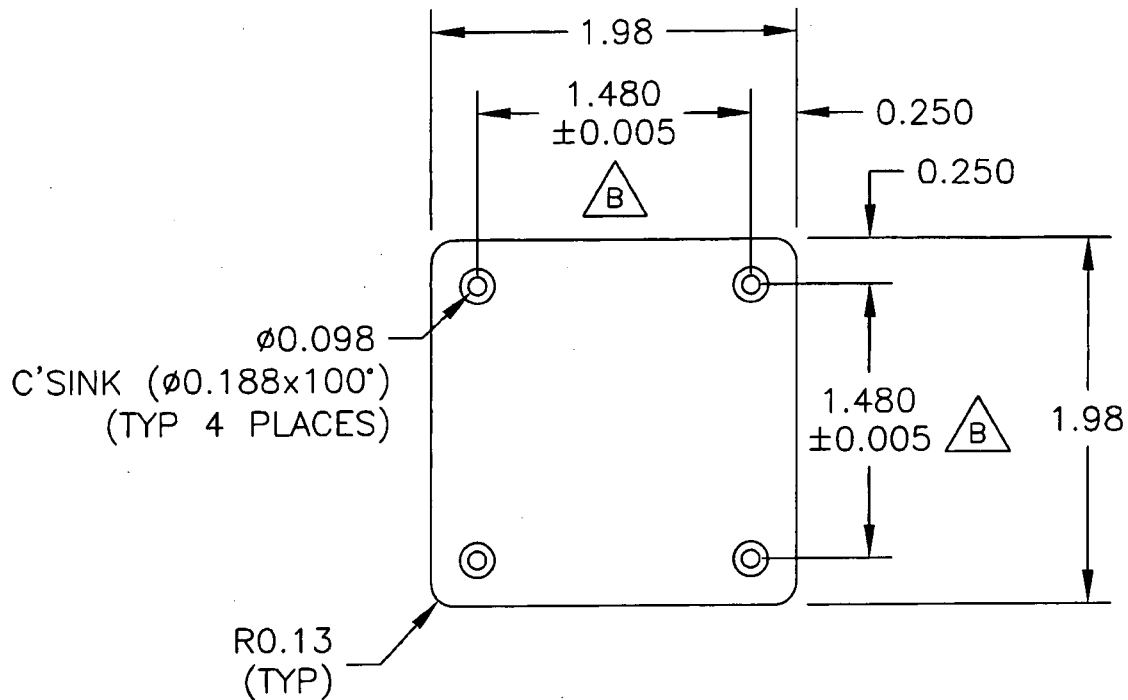
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CHECKED <i>B</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3278	REV. C SHEET 3 OF 3
DATE 07.07.24		TITLE SUPPORT ASSEMBLY	SCALE 1:1

RELEASED
07.08.08**D3278-3 SPACER**

- 1) MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL
(REF. DART SPEC. M-DELRIN-B0.125x2.000) OR
DELRIN II 150E OR ACETRON GP ACETAL
(REF. DART SPEC. M-DELRIN-S.125)
- 2) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

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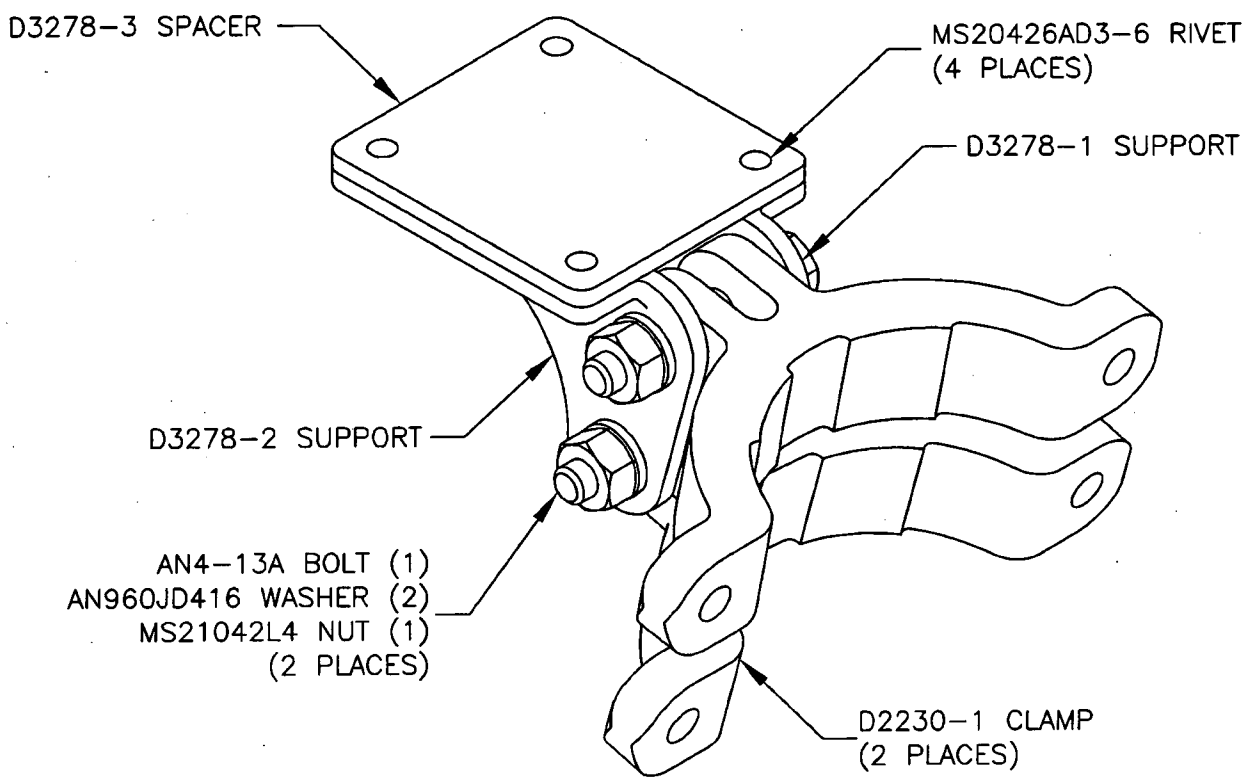
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CHECKED <i>B</i>	APPROVED <i>H</i>	DRAWING NO. D3278	REV. C SHEET 1 OF 3
DATE 07.07.24		TITLE SUPPORT ASSEMBLY	SCALE NTS
A	04.03.03	NEW ISSUE	
B	05.03.31	CHANGE DIM/TOL TO ENSURE FIT	
C	07.07.24	CHANGED RIVETS PER PAR #185	

RELEASED
07-08-06

D3278-041 SUPPORT ASSEMBLY



Qty	Part Number	Description
X	D3278-041	SUPPORT ASSEMBLY
2	D2230-1	CLAMP
1	D3278-1	SUPPORT
1	D3278-2	SUPPORT
1	D3278-3	SPACER
2	AN4-13A	BOLT
4	AN960JD416	WASHER
4	MS20426AD3-6	RIVET
2	MS21042L4	NUT

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries